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DIAGRAMS



THE PASSION PEOPLE













INTRODUCTION

PREFACE

Welcome to the PASSION PEOPLE,

Congratulations on your purchase of the latest generation MAGURA suspension fork – developed in Germany.

This owner's manual is an integral part of your MAGURA product and gives you details of the required tools, correct installation, safe use, maintenance and setup options.

Please read this manual carefully before you install or use your MAGURA product. Always observe and follow all instructions on installation, use and maintenance provided in this manual and in user instructions by third-party manufacturers whose products you use on your bicycle (headset, stem, wheels, suspension forks etc.).

Remember that the mechanic who installs your MAGURA product is responsible for the suitability and compatibility of all the components technically linked to your MAGURA product.

WARNING

Failure to observe the instructions in this manual can lead to serious or fatal accidents.

You can find the diagrams that this manual refers to in the folder in the front and back covers.

The figures in this manual may differ slightly from your MAGURA product, however, the required steps are the same for all types and variants – if not stated to the contrary.

The type name (1), variant (2) and dimension (3) of your MAGURA suspension fork are located on the rear right of the fork crown [A1].

Please note that the geometry and riding behaviour of your bicycle may change due to installing a new suspension fork.

During the first few rides using your new MAGURA suspension fork, familiarize yourself with those characteristics of your bicycle (cornering, sag, braking, etc.), which may have changed.

LEGEND

- The pointing finger prompts you to perform an action.
- → The arrow shows results or requirements.
- ① This notice gives you additional information or tips.
- (3) refers to an item number in the graphic area e.g. item (3).

[B2] refers to a diagram in the graphic area - e.g. figure B2.

A WARNING

This notice warns you about a dangerous situation which can lead to serious or fatal injury if not avoided.

A CAUTION

This notice warns you about a dangerous situation which can lead to minor or slight injury if not avoided.

NOTICE

🗄 💹 NOTICE – ENVIRONMENT

This notice warns you about the risk of material or environmental damage.

Keep this manual for other users of your MAGURA product. Make sure that each user reads, understands and observes this manual. If you sell or give away your MAGURA product, be sure to hand over this manual to the new owner.

Visit **www.magura.com** for more tips and information on your MAGURA product. You can also exchange experiences, ask questions and generally "talk shop" with many PASSION PEOPLE members on the MAGURA Forum.

We wish you great success and a great ride Your MAGURA Team ① Some of the features detailed are optional variants.

Your MAGURA suspension fork is equipped as designed by your dealer or the bicycle manufacturer.

	Type name		TS8				TS6						
	Variant			150	140	120	100	80	150	140	120	100	80
S	Suspension		Air										
NO	Air pressure max. bar (psi)		10 (150)										
SPECIFICAT	Damping		Oil										
	Pressure level control [TD]			DLO ³		albert SL • eLECT • DLO ³ • DLO ²		DLO ³		eLECT • DLO ³ • DLO ²			
	Applications			AllMountain XC, XC Race			AllMountain)	XC, XC Race			
	Total weight max. ³		kg (lb)	130 (286)									
	Steerer (A) [TD] mm			11/8" • 11/8"-1.5" tapered • 1.5"									
			mm	255									
	Suspension travel (B) [TD]		mm (in)	150 (5.9)	140 (5.5)	120 (4.7)	100 (3.9)	80 (3.1)	150 (5.9)	140 (5.5)	120 (4.7)	100 (3.9)	80 (3.1)
	Height(C)[TD]	26"		530	520	503	473	453	-	-	503	483	463
		650B ¹	mm ±3	539	529	512 516 ⁵	486	466	-	-	516	496	476
		29"		561	551	530	510	490	561	551	530	510	490
	Rim brake bridge ²		- Cantilever socket				- Cantilever socket						
s	26"			Postmount 7"		Postmount 6" • Postmount 7"		- Postmount 7"		Postmount 6" • Postmount 7"			
NO	Disc brake bridge ⁴	650B ¹											
IS		29"		Postmount 7"									
AE,	Ø Disc brake rotor min.–max.	26"	1		30-210	160-210 ⁵ • 180-210		80-210	-		160-210 ⁵ • 180-210		
ā		650B ¹	mm	180-210						2.10			
		29"				180-210							
		26"		26×2.6 (62-559)		26×2.4 (60-559)		-		26×2.4 (60-559)			
	Tire dimension max.	650B ¹		27.5×2.5 (64-584) • 27.5×2.4 (60-584) ⁵									
	29"			29×2.4 (60-622)									
	Installation dimensions hub (D) [TD] mm		100										
	26"			MAGURA M15 MA				-					
	Quick release system ⁴ [TD]	650B ¹				WAGUR	WAGORA WITS • QR (911111)		MAGURA M15		WAGUR		
		29"		MAGURA M15									

¹ 650B = 27.5" ³ Maximum approved total weight = rider + bicycle + luggage ² Only 26". ⁴ Postmount 7" always with MAGURA M15, postmount 6" always with QR (9 mm). ⁵ With lower leg with postmount 6" / QR (9 mm).

SAFETY

INTENDED USE

A WARNING

Any use other than the intended use can lead to accidents that cause serious or fatal injury.

MAGURA TS8 and TS6 suspension forks are designed and intended only

- for installation on standard, commercially available bicycles designed according to the dimension of the suspension fork – 26", 650B (27.5") or 29".
- for use with a front wheel that corresponds to the dimension of the suspension fork – 26", 650B (27.5") or 29".
- for the specified application see SPECIFICATIONS, page 17.
- for the maximum approved total weight see SPECIFICATIONS, page 17.

MAGURA TS8 and TS6 suspension forks provided with the disk brake bridge in the dimension postmount 7" are designed and intended only

- for mounting a disc brake (Ø 180-210 mm).
- for use of the MAGURA M15 thru axle and a front wheel hub suitable for this.

MAGURA TS8 and TS6 suspension forks provided with the disk brake bridge in the dimension postmount 6" are designed and intended only

- for mounting a disc brake (Ø 160–210 mm) or for mounting a V-brake or a hydraulic rim brake.
- for use of a commercially available quick release skewer(QR) and a front wheel hub suitable for this (axle diameter 9 mm).

MAGURA suspension forks must never be used in combination with front wheel motors!

BASIC SAFETY INSTRUCTIONS

Always remember that riding a bicycle entails risk both for the rider and other road users, and for the bicycle and its components. Despite the use of safety gear and complete safety equipment, accidents that cause serious or fatal injury can occur.

Always use your common sense and avoid any unreasonable actions!

Installation & Maintenance

A WARNING

Danger of accident due to damaged suspension fork caused by incorrect or impermissible installation work.

- Never overestimate your technical capabilities. Commission a specialist workshop for bicycles or an authorized MAGURA service centre with all installation and maintenance work. This is the only way to ensure that work is conducted in a professional manner.
- Never make changes to your MAGURA product (e.g. tapping thread on the steerer, milling the disc brake bridge, removing the hanger on the dropouts, drilling, painting, opening the eLECT unit, etc.).
- Always observe all min./max. values stated see Technical Specifications, page 17.
- For assembly steps that require a specific tightening torque for a screw union, always use a torque wrench set up for the required torque.
- Always maintain your bicycle in technically perfect working order.

Danger of accident due to improper accessories.

- Use only MAGURA original parts and lubricants.

 Never install mounting clips, luggage carriers, mudguards or similar on your MAGURA suspension fork.

If needed, fit a MAGURA approved mudguard.

On the road

A WARNING

Danger of accident due to component failure.

- Before each ride, make sure that the quick release system on your wheels is fitted correctly and that your wheels will not work loose.
- Before each ride, make sure that the handlebar and stem are correctly fitted and will not twist.
- Before each ride, work the suspension multiple times to make sure that your MAGURA suspension fork is leak tight and shows no sign of oil leaks on screws, sliders and seals, or any other visible mechanical damage.
- Before each ride, make sure that your brakes are working properly and that the brake pad thickness is sufficient.
- Never exceed the maximum approved total weight see **S**PECIFICATIONS, page 17.
- During riding, avoid uncontrolled hard dipping/bottoming out of your MAGURA suspension fork.
- After a crash, check your MAGURA suspension fork for signs of damage and perfect function.
- Never use your MAGURA suspension fork in case of visible damage, unusual noise, or if you are unsure as to its condition. In this case, have your suspension fork checked in a bicycle workshop or directly by MAGURA Service.

Danger of accident due to improper behaviour or improper equipment during riding.

- Never use your MAGURA suspension fork for downhill, freeride, freestyle applications, or other disciplines that involve jumping with the bicycle, or where extreme loads are to be expected.
- Always observe the traffic regulations in the country where you are riding (lighting, reflectors, etc.) and the local regulations relating to mountain biking.
- When riding, always wear a high quality (e.g. ANSI certified), undamaged cycling helmet and clothing that fits snugly but does not impair

your actions.

- Only ride your bicycle if you are in good physical condition and your bicycle and all of its components are in perfect working order.

NOTICE

Reduced eLECT operation at low temperatures.

The capacity of NiMH rechargeable batteries and Li batteries is highly restricted even at ambient temperatures of about 0 $^{\circ}$ C (32 $^{\circ}$ F).

Transport & Storage

A WARNING

Danger of accident due to damaged components.

- Never transport your bicycle using vehicle bicycle carriers that require you to secure the fork by its dropouts without the front wheel.
- Always install a suitable spacer between the dropouts on your MAGURA suspension fork if you stow your bicycle with the wheels removed (transport bag, carton, etc.).

NOTICE

Discharge of the rechargeable battery due to unintentional eLECT activity.- Switch off eLECT whilst your bicycle is being transported.

Harmful exhaustive discharge of the rechargeable battery if not used for a long time.

- Switch off eLECT during long periods when it is not in use.
- Charge the eLECT battery about 1× per month.

B NOTICE – ENVIRONMENT

Never dispose of batteries, rechargeable batteries and electronic devices with normal domestic waste; instead, always take them to a specified collecting facility.

SAFETY

INSTALLING THE SUSPENSION FORK

Make sure that the frame, headset, stem, and adjusting nut match the steerer on your suspension fork – see TECHNICAL SPECIFICATIONS, page 17.

Shortening the steerer

NOTICE

Suspension fork unusable due to over-shortened steerer.

- Measure carefully and check the calculated length before cutting.
- Originally allow for 1 additional spacer you can always shorten again, but you can't extend!

Correct calculation of length L of your steerer [B1]:

- A1 upper height
- A2 lower height
- **H** Height of steerer (frame)
- **S** Total height of spacers
- V height (tube clamp) stem
- L = (A1 + A2 + H + S + V) 2 mm
- Use a sharp, finely toothed metal saw, or pipe cutter, to shorten the steerer to the required length – deburr.

Fitting the headset

NOTICE

Damage to the suspension fork.

- When installing the bearing seat and adjusting nut do not rest the suspension fork on the dropouts.

Increased bearing wear.

- Make sure that the lower bearing seat lies totally flat and flush against the headset.
- Grease the bearing seat (1) [B2] and steerer contact area.
- Using a suitable installation aid tap the bearing seat into its position on the steerer – rotate the steerer through 5–10° after each tap.

Using a suitable installation aid, tap the adjusting nut carefully and straight into the steerer [B3].

Installing the suspension fork

- Install the suspension fork with headset components, spacers and stem on the frame.
- Adjust the headset so that it is free of play.
- Align the stem straight.
- Tighten the clamping screws on the stem to the tightening torque stated by the manufacturer.

Fit the brake

- Make sure that the front wheel brake dimensions and type match your suspension fork see Technical Specifications, page 17.
- ① Secure the front wheel brake with a low tightening torque at first. Fine adjustment and final installation with clean routing and possibly shortening of the brake tubing is performed with the front wheel fitted.

A WARNING

Danger of accident due to damaged components.

- Never exceed the maximum tightening torques of the fastening screws: Disc brake (postmount) max. 10 N·m (89 lbf·in).
 Cantilever socket max. 6 N·m (53 lbf·in).
- Secure the brake tubing for the front disc brake with the tubing guide [C1].
- Tighten the screw on the tubing guide with a tightening torque of max. 2 N·m (18 lbf·in).

G MAGURA

FITTING THE FRONT WHEEL

A WARNING

Danger of accident due to front wheel blocking because of faulty installation work.

- Make sure that a minimum gap of at 2 mm exists between rotating parts (hub, fastening screws on the disc brake rotor, etc.) and the suspension fork. Replace the parts if needed.
- Make sure that the brake cable can never touch the tire.
- Make sure that, when fully depressed, your suspension fork has a minimum clearance of 6 mm between the tire and the crown. Replace the tire if needed.
- Make sure that the front wheel brake system is correctly fitted and adjusted.

Danger of accident due to quick release system failure due to impairment through soiling.

 Whenever you install the front wheel, make sure that the dropouts on your suspension fork and all the parts of your quick release system are clean.

Danger of accident due to faulty installation work.

- MAGURA suspension forks with dropouts for thru axle (PM 7") must be combined exclusively with the MAGURA M15 thru axle clamping system.
- Make sure that the dimensions and type of the front wheel hub, wheel, tires, quick release system and disc brake rotor match your suspension fork – see TECHNICAL SPECIFICATIONS, page 17.
- If applicable mount the disc brake rotor on the front wheel hub.

... using traditional quick release skewer

A CAUTION

Danger of injury on sharp and/or hot disc brake rotor when removing the front wheel.

- Always mount the clamping lever on the front wheel quick release on the right-hand side.
- $\ensuremath{\textcircled{}}$ Installing the clamping lever on the right can also reduce brake disc squeal.
- Centre the front wheel precisely in the dropouts of your MAGURA suspension fork – check for correct direction of rotation.
- Adjust and close the quick release skewer in line with the user's instructions.

... using the MAGURA M15 thru axle clamping system

A WARNING

Danger of accident due to faulty installation work.

- MAGURA M15 must be combined exclusively with MAGURA suspension forks with dropouts for thru axle (PM 7").
- Insert the front wheel into the dropouts (1) on your MAGURA suspension fork check for correct direction of rotation.
- Push the MAGURA M15 axle from the right through the dropout and hub axle [D1].
- Screw the MAGURA M15 axle clockwise finger-tight into the left dropout of your suspension fork.
- Tighten the MAGURA M15 axle with a tightening torque of 10 N·m (89 lbf·in).
- ☞ Insert emergency tool (2) into the MAGURA M15 axle from the left.
- Tamiliarize yourself with the force required to reach the required tightening torque. This will allow you to tighten your front wheel securely without a torque wrench even when you are away from home.

FITTING THE REMOTE CONTROL LEVER (RCL²)

① You will notice that DLO² is suitable for remote control because the blue dial is returned to its original position by a return spring if turned by hand. Blue dials that do not have a return spring do not support remote control with RCL²! However, retrofitting is possible at a MAGURA service centre. DLO³ is not suitable for remote control!

A WARNING

Danger of accident due to faulty installation work.

- Make sure that the RCL² cannot interfere with brake and gear shift actuation and function in any lever position.

NOTICE

Damage to material due to faulty installation work.

- Never fit the clamps in the wider area of the handlebar.
- Never exceed the maximum tightening torques.

There are 3 different fastening options for the RCL²[E1]:

- Standard clamp (1) for fitting next to the brake lever.
- Standard clamp with spacer (2) and long clamping screw (3) for fitting next to the brake lever in combination with twist shifters.
- Remote mix clamp (4) only for direct fitting to brake levers of MAGURA MT Series and HS Series (MAGURA rim brakes) as of model year 2011.
- ① RCL² for DLO² is generally mounted on the right [E2] however, it can be mounted on the left side if required.
- *The standard clamp on the handlebar.*
- → Make sure that the brake and gear shift actuation and function is not impaired in any RCL² lever position.
- \rightarrow The lever (5) and return dial (6) on the RCL² must be easily reachable.
- Tighten the clamping screw (7) (3) on the standard clamp with a tightening torque of max. 3 N·m (27 lbf·in).
- Tighten the sleeve nuts⁽⁸⁾ on the Remote Mix clamp with a tightening torque of max. 3 N·m (27 lbf·in).

Fit the RCL² Bowden cable

A WARNING

Danger of accident due to faulty installation work.

- Make sure that the Bowden cables on the RCL² can never interfere with steering.
- → The outer sleeve must be laid via the shortest route, without torsion or kinking, between the stops (9) on the RCL² and the fork crown [E2].
- Shorten the outer sleeve of the Bowden cable with suitable Bowden cable pliers.
- Alke sure that the lever on the RCL² is relieved press the return dial if necessary.
- Feed the inner cable through the RCL², outer sleeve and stop on the fork crown.
- Make sure that the outer sleeve is firmly seated in the stops.

Fit the inner DLO² cable [E3]:

- ☞ Remove the cover on the "DLO2" by unscrewing counter-clockwise.
- ☞ Loosen the clamping screw (10) by 2-3 turns.
- Tension the inner cable and insert it into the groove on the rotating dial and under the washer on the clamping screw and hold in place.
- Tighten the clamping screw with a tightening torque of max. 2 N·m (18 lbf·in).
- $\ensuremath{\mathscr{T}}$ Trim the inner cable to a length of approx 2 cm after the clamping screw.
- Push the end of the inner cable through the cutout into the inside of the rotating dial.
- $\ensuremath{\mathscr{T}}$ Replace the cover on the "DLO2" by screwing it on clockwise.
- ☞ Retension the inner cable after the first 10-20 actuations.

TAKING THE **elect** into operation

Charging the eLECT rechargeable battery

① Charge your eLECT rechargeable battery before taking it into operation for the first time.

A WARNING

Danger of accident due to improper accessories.

- When charging the rechargeable battery, exclusively use intact micro-USB mains adapters that are also suitable for mobile smartphones.
- Remove the eLECT cover by unscrewing it counter-clockwise [L1] or open the cap (rear shock) [L2].
- ☞ Switch off the eLECT (OFF) [L1] [L2].
- Connect the micro-USB plug to the charging socket.
- Connect the mains adapter to the mains.
- → LED (1) flashes slowly (1 s).
- → Rechargeable battery is being charged (approx. 3 h).
- → LED(1) is red.
- → Rechargeable battery is charged.
- ① Your eLECT rechargeable battery is protected against overcharging. Avoid unnecessary electricity consumption by disconnecting the mains adapter and micro-USB cable from the mains after charging.
- Disconnect the micro-USB plug from the charging socket.
- → LED goes out.
- ☞ Switch on the eLECT (ON) [K1] [K2].
- Replace the cover on the eLECT by screwing it on clockwise or close the cap (rear shock).

Installing the eLECT remote control

- ① Only eLECT units with a printed ANT+ symbol [M1] can be remotely controlled – and this requires the corresponding ANT+ eLECT remote control.
- The eLECT remote control makes it possible to change over from automatic to manual mode. If you operate the eLECT exclusively in automatic mode, you do not need to install the remote control.
 The MAGURA eLECT rear shock does not have the automatic mode of your MAGURA suspension fork the eLECT remote control can be used to switch the compression damper between OPEN and LOCKOUT
 - see the User Instructions TS RL \bullet TS RC.

A WARNING

Danger of accident due to faulty installation work.

- Make sure that the eLECT remote control cannot interfere with brake and gear shift actuation and function in any lever position.
- \textcircled The eLECT remote control (1) [M2] is generally mounted on the right with the buttons facing the handlebar.

It can also be mounted on the left-hand side – or with the buttons facing the handlebar stem – if desired. In this case the arrow keys can be switched around – see Assigning the arrow keys on the eLECT remote control, page 24.

- ☞ Define the position of the eLECT remote control on the handlebar.
- → Brake and gear shift actuation and function are not allowed to be impaired by the eLECT remote control.
- Place the rubber half shell (2) between the handlebar and the remote control.
- ☞ Fix the eLECT remote control to the handlebar with rubber ring (3).

INSTALLATION

Assigning the arrow keys on the eLECT remote control

- The front arrow key of the eLECT remote control is best assigned to your suspension fork, and the rear key to your rear shock.
 This assignment can be changed depending on where your eLECT remote control is mounted.
- Press the round button on the remote control 1×.[N2]
- → The remote control LED flashes green and red.
- → The eLECT remote control is "awake".
- Press and hold the round button and the front arrow key on the remote control for at least 2 s. [N6]
- → The remote control LED is steady red approx. 2 s.
- → The remote control LED flashes green and red.
- → The front arrow key is assigned to the suspension fork.

Synchronising the eLECT remote control

The eLECT remote control and the eLECT unit must be synchronised (paired) when used for the first time and after replacing the battery.

NOTICE

Malfunctions.

- Make sure that the eLECT remote control is at least 40 m away from other ANT+ devices (navigation unit, speedometer, PC etc.).
- Press and hold the button on the eLECT unit (suspension fork and if applicable rear shock) for at least 8 s. [N1]
- → The eLECT unit LED is steady red.
- → The suspension fork and if applicable the rear shock are ready for synchronisation.
- Press the round button on the remote control 1×.[N2]
- → The remote control LED flashes green and red.
- → The eLECT remote control is "awake".
- ${\ensuremath{\,{\rm \tiny P}}}$ Press and hold the two arrow keys on the remote control for at least 3 s. [N3]
- → The remote control LED is green and red.
- \rightarrow Synchronisation is performed this may take up to 30 s.
- → The eLECT unit LED flashes red 3× [N4] and the remote control LED flashes green [N5].
- → Synchronisation is completed.

Before you go for your first ride with your new MAGURA suspension fork, take some time to adjust the suspension and damping to match your personal weight and style of riding. This is absolutely necessary to make best use of your suspension fork's characteristics.

AIR PRESSURE GUIDELINES

① Note that the specified air pressure values are for reference only. You should adjust them for your personal riding style, your seating position, the characteristics of the road, and the geometry of your bicycle.

Rider	weight	Air pressure			
kg	lb	bar (± 0.5)	psi (± 7)		
50-59	110-124	3.5-3.9	50-52		
60-69	125-149	4.0-4.3	53-60		
70-79	150-174	4.4-5.0	61-70		
80-89	175-199	5.1-5.6	71-78		
90-99	200-224	5.7-6.3	79-85		
100-109	225-249	6.4-7.0	86-99		
110-119	250-274	7.1-8.0	100-114		
120-130	275-286	8.1-8.9	115-126		

Adjusting the suspension (Air pressure)

① The air suspension on your MAGURA suspension fork helps to compensate for uneven terrain and keeps your front wheel in contact with the ground at all times.

Insufficient air pressure causes a pronounced drop, frequent bottoming out and a spongy ride.

Excessive air pressure reduces the maximum suspension travel and provokes a hard response from your suspension fork.

As a general rule, the higher your weight and speed, and the rougher the terrain, the higher the air pressure will need to be.

NOTICE

Material damage due to severe bottoming out caused by insufficient air pressure.

- Never use your suspension fork if there is insufficient or no air pressure.

Material damage due to excessive air pressure.

- Never exceed the maximum permissible air pressure of 10 bar (150 psi).

Air leaking due to incorrect fitting of the valve cover.

- Never use the suspension fork without a valve cover.
- Always keep the valve cover seals clean.
- Always firmly close the valve cover.
- Remove the valve cover (1) by turning counter-clockwise [F4].
- Shift the lever (2) on the pump head to the upper position (Position A) [F5].
- Screw the union nut⁽³⁾ on the pump head onto the valve until hand tight.
- ☞ Shift the lever (2) on the pump head to the lower position (Position B).
- → The valve pin is pressed in; the valve is open.
- \rightarrow You can read off the current pressure on the pump pressure gage.
- Adjust the air pressure if needed.
- ① Pushing the ventilation button (4) fully gradually reduces the pressure. Pushing the ventilation button lightly completely evacuates the pressure.
- *The Shift the lever (2) on the pump head to the upper position (Position A).*
- \rightarrow The valve pin is released; the valve is closed.
- $\textbf{ > } \ensuremath{\mathsf{No}}$ loss of pressure when you remove the union nut.
- Remove the union nut.

SetUp

SetUp

Check the air pressure

① The negative suspension stroke – or *sag* – is the distance by which your suspension fork is lowered when it is subject to your body weight at a standstill and it gives you the initial feedback whether the air pressure is generally within the correct range.

Suspens	ion travel	sag ≈ 20–30 %			
mm	in	mm	in		
80	3.1	16-24	0.6-0.9		
100	3.9	20-30	0.8-1.2		
120	4.7	24-36	0.9-1.4		
140	5.5	28-42	1.1-1.7		
150	5.9	30-45	1.2-1.8		

- ☞ Make sure that DLO³ or DLO² is disabled (OPEN/OFF) [F1].
- Make sure that eLECT is switched on (ON) [K1] and is in "DLO² deactivated (OFF)" status.
- ☞ Push the rubber ring (5) [F6] on the left stanchion right down.
- Mount your bike carefully don't bob up and down.
- → The suspension sag will depend on your bodyweight.
- Carefully dismount.
- *The Area and The Second Secon*
- → The negative suspension stroke should be 20–30% of the total possible suspension travel on your suspension fork see DIMENSIONS, page 17.
- Increase the air pressure if the negative suspension stroke is above 30%.
- ☞ Reduce air pressure if you have a negative suspension stroke below 20%.
- To finely adjust the air pressure in your suspension fork, you will need to go for a trial run on a typical test route.
- Increase the air pressure if the suspension bottoms out more than 1 or 2 times.
- Reduce the air pressure if your suspension fork don't achieve the potential stroke (you can see this by checking the final position of the rubber ring).

Adjusting the damping (REBOUND DAMPER)

 ${\rm \textcircled{O}}$ The rebound damping setting defines the speed at which your MAGURA suspension decompresses.

A high rebound damping setting (+) causes slower decompression thus reducing ground contact and possibly impairing traction and control. Lower rebound damping setting (-) causes faster decompression which causes the front wheel to jump and can thus also impair traction and control.

As a general rule, the higher your bodyweight and speed, and the rougher the terrain, the higher the rebound damping will need to be.

- The make sure that DLO³ or DLO² is disabled (OPEN/OFF) [F1].
- Make sure that eLECT is switched on (ON) [K1] and is in "DLO² deactivated (OFF)" status.
- Start by turning the red adjusting dial counter-clockwise to the stop (-) [G1].
- ☞ Turn the red adjusting dial 6-7 clicks in clockwise direction (+).
- → This sets the rebound damping to an average value.
- ① A short test is necessary for granular adjustment of the damping: while sitting on the saddle, ride off a low step (curb or similar).
- Increase the rebound damping gradually by 1 click (+) if the suspension rebounds more than 1 or 2 times.
- Gradually reduce the rebound damping by 1 click (-) if your suspension decompresses too slowly.

Adjusting the damping (compression damper)

 $\ensuremath{\textcircled{}}$ The compression damping of all MAGURA suspension forks is factory set and cannot be changed.

However, with the compression lever of the DLO³, you can preset the compression damping on your MAGURA suspension to suit your own needs [G2].

- **OPEN** Suspension fork is fully activated.
- → Sensitivity (compression behaviour) fully present.
- **FIRM** Suspension fork is less active.
- → This favours an aggressive riding style.
- → Sensitivity (compression behaviour) is reduced.
- → Bottoming behaviour is reduced.
- → Feedback from the ground is greater.
- → The negative suspension stroke or **sag** is kept.
- @ CLOSE Suspension fork is very hard on compression.
- → Sensitivity (compression behaviour) is greatly reduced.
- → Uphill riding is favoured.
- → The negative suspension stroke or sag is kept.
- ① Your suspension fork will still buffer and damp hard knocks in enabled state (CLOSE), if you forget to disable (OPEN) before riding downhill.

CALIBRATING eLECT

① The system must be calibrated before your eLECT can operate correctly. Different positions of your bicycle (e.g. -1.5°/0°/+1.5°) during the calibration enable you to preset the responsiveness of eLECT according to your requirements. [P1].

This refers to your suspension fork (master) – your MAGURA rear shock uses the same calibration.

The following steps must be performed before calibration:

- → see Taking the eLECT into operation, page 23.
- → see Adjusting the suspension (Air pressure), page 25.
- → see Adjusting the damping (rebound damper), page 26.
- \rightarrow Rear frame suspension and inflation pressure matched to one another.
- Switch on eLECT (ON) [K1] or perform a reset if eLECT was already switched on - see Performing an eLECT reset, page 32.
- Move your bicycle to a neutral position (0°) [P1].
- ☞ Press and hold the button on the eLECT unit for 3-5s[P1].
- → The eLECT unit LED is steady red.
- → Calibration is performed.
- → The LED of the eLECT unit flashes red $2 \times$ quickly (0.5 s).
- → Neutral calibration (0°) is completed.
- If you would like to preset eLECT more accurately according to your requirements, you should now take a test ride on a representative test route, and conduct several calibrations if necessary.
 Proceed stage-by-stage until the responsiveness of your eLECT corre-

sponds to your requirements.

At each stage, it is recommended that the front or rear wheel of your bicycle should be raised by 1–2 cm in each case. Use corresponding wooden boards to increase the height [P2].

- Move your bicycle to a negative position (e.g. -1.5°) [P1].
- Perform the calibration as described above.
- → eLECT activates DLO² on relatively slight inclines or even when riding on the flat.
- or:
- Move your bicycle to a positive position (e.g. +1.5°) [P1].
- Perform the calibration as described above.
- → eLECT only activates DLO² on steeper inclines.

For more information: - see LOCKING OUT THE SUSPENSION FORK - DLO², page 28.

SetUp

ON THE ROAD

Before each ride

A WARNING

Danger of accident due to component failure.

- Before each ride, make sure that the quick release system on your wheels is fitted correctly and that your wheels will not work loose.
- Before each ride, make sure that the handlebar and stem are correctly fitted and will not twist.
- Before each ride, work the suspension multiple times to make sure that your MAGURA suspension fork is leak tight and shows no sign of oil leaks on screws, sliders and seals, or any other visible mechanical damage.
- Before each ride, make sure that your brakes are working properly and that the brake pad thickness is sufficient.
- Never use your MAGURA suspension fork in case of visible damage, unusual noise, or if you are unsure as to their condition. In this case, have your suspension fork checked in a bicycle workshop or directly by MAGURA Service.
- The make sure that DLO3 or DLO2 is disabled (OPEN/OFF) [F1].
- Make sure that eLECT is switched on (ON) [K1] and is in "DLO² deactivated (OFF)" status.
- Deflect the suspension multiple times with the front wheel brake on.
- → The damper unit is reliably flooded with oil.
- → The damping unit on the suspension fork will now work reliably from the start of your ride.
- Make sure that the suspension fork respond perfectly and with sufficient sensitivity.

If needed, do some "minor service work".

See the maintenance guide on **www.magura.com** >>> service >>> downloads.

- ☞ Check the air pressure see Adjusting the suspension (Air pressure), page 25.
- Check the eLECT rechargeable battery capacity see Checking the eLECT rechargeable battery capacity, page 30.

LOCKING OUT THE SUSPENSION FORK - DLO²

- ① Activating Dynamic Lockout DLO² saves energy riding uphill. This sets the compression damping to the maximum value. Your MAGURA suspension fork will hardly deflect when you stand on the pedals.
- OFF Suspension fork is fully activated [H1].
- → Sensitivity (compression behaviour) fully present.
- ${\ensuremath{\it \ensuremath{\ensuremath{\it e}\xspace}}\xspace$ Suspension fork is very hard on compression.
- → Sensitivity (compression behaviour) is greatly reduced.
- → Uphill riding is favoured.
- → The negative suspension stroke or **sag** is kept.
- ① Your suspension fork will still buffer and damp hard knocks in enabled state (ON), if you forget to disable (OFF) before riding downhill.

ON THE **R**OAD

G MAGURA

- ① Every time eLECT is switched on (ON) [K1] [K2] the system starts in the status that was current before it was switched off:
- automatic mode/manual mode or DLO^2 ON/OFF (suspension fork) and if applicable OPEN/LOCKOUT (rear shock).

The same applies every time the eLECT remote control is switched on. $[\ensuremath{\mathtt{N2}}]$

... with eLECT in automatic mode

- eLECT takes over automatic control of the DLO² of your MAGURA suspension fork. It is a precondition that the system must have been calibrated correctly see CALIBRATING ELECT, page 27.
 Your MAGURA rear shock is also automatically controlled: DLO² ON – LOCKOUT / DLO² OFF – OPEN – see User Instructions – TS RL • TS RC.
- Press the button on the eLECT unit (suspension fork) 1× briefly [R1].
- \rightarrow The LED of the eLECT unit flashes red 1× (2 s).
- → Rechargeable battery capacity high. DLO² is ready to operate in automatic mode.
- → The LED of the eLECT unit flashes red $2 \times$ guickly (0.5 s).
- → Rechargeable battery capacity low. DLO² is ready to operate in automatic mode. Remaining riding time approx. 4 h.

or:

or:

- → The LED of the eLECT unit flashes red $4 \times$ very quickly (0.25 s).
- → Rechargeable battery capacity exhausted. Sleep mode.
- → DLO² deactivated (OFF).

... with eLECT in manual mode

The eLECT remote control allows manual activation or deactivation of DLO² (ON/OFF) and the MAGURA rear shock (LOCKOUT/OPEN) – see USER INSTRUCTIONS – TS RL • TS RC.

The first time you press the round button on the remote control, you exit automatic mode and change the current DLO² status – from activated to deactivated (ON–OFF) or vice versa (OFF–ON).

Every time one of the two arrow keys is pressed you switch between activating and deactivating DLO^2 (ON-OFF or LOCKOUT-OPEN). You can only return to automatic mode on the eLECT unit of your suspension fork – see ... WITH ELECT IN AUTOMATIC MODE, page 29.

- Press the round button on the remote control 1x briefly [R2].
- \rightarrow LED of the remote control is green.
- → LED of the remote control flashes $1 \times (2 \text{ s})$ green.
- → Rechargeable battery capacity high. DLO² activated (ON) or deactivated (OFF).
- or:
- \rightarrow LED of the remote control flashes 4× very guickly (0.25 s) red.
- Rechargeable battery capacity exhausted. Sleep mode DLO² deactivated (OFF).
- The Press the front arrow key on the remote control 1× briefly [R3].
- → DLO² ON-OFF
- There are a series on the remote control 1× briefly.
- → LOCKOUT-OPEN
- ☞ Press the round button on the remote control 1× briefly.
- → DLO² ON-OFF & LOCKOUT-OPEN
- ① Your suspension fork will still buffer and damp hard knocks in enabled state (ON), if you forget to disable (OFF) before riding downhill.

MAINTENANCE

A WARNING

Danger of accident due to pressurised parts.

- Never open your MAGURA suspension fork via the top screws in the fork crown or the screws at the bottom end of the stanchions. Contact your authorised MAGURA service centre if your suspension fork needs a major service. This is the only way to ensure that work is conducted in a professional manner.
- ① Visit www.magura.com >>> service >>> downloads for a maintenance guide for your MAGURA suspension fork in PDF format. The guide gives you step by step instructions for easier maintenance work that you can perform on your suspension fork yourself.

AFTER EACH RIDE

Clean the stanchions with a clean, dry cloth [J2].

NOTICE

Increased wear on seals due to soiling.

- Do not apply lubricants to the stanchions.

Checking the eLECT rechargeable battery capacity

- ☞ Press the button on the eLECT unit 1× briefly [S1].
- \rightarrow The LED of the eLECT unit flashes red 1× (2 s).
- → Rechargeable battery capacity high. DLO² is ready to operate in automatic mode.

or:

- → The LED of the eLECT unit flashes red 2× quickly (0.5 s).
- → Rechargeable battery capacity low. DLO² is ready to operate in automatic mode. Remaining riding time approx. 4 h.
- Charge rechargeable battery see Charging the eLECT rechargeable battery, page 23.

or:

- → The LED of the eLECT unit flashes red 4× very quickly (0.25 s).
- → Rechargeable battery capacity exhausted. Sleep mode DLO² deacti-

vated (OFF).

Charge the rechargeable battery – see Charging the eLECT rechargeable battery, page 23.

Regular

① How frequently you need to maintain your MAGURA suspension fork depends on how often you use it, but also on weather influences. Perform the following maintenance steps more frequently if you use your bicycle in extreme conditions (rain, dirt, high mileage, etc.).

NOTICE

Corrosion and material damage due to water penetration.

- Never use a pressure or steam cleaner to clean your bicycle the seals on your bicycle components are not built to withstand this pressure.
- You should even exercise care if you use a water hose. Never point the water jet directly at seal areas [J3].
- *The Clean the suspension fork with water, detergent and a brush.*
- The make sure that DLO³ or DLO² is disabled (OPEN/OFF) [F1].
- Make sure that eLECT is switched on (ON) [K1] and is in "DLO² deactivated (OFF)" status.
- Deflect the suspension multiple times with the front wheel brake on.
- Make sure that the suspension fork respond perfectly and with sufficient sensitivity.

If needed, do some "minor service work".

See the maintenance guide on www.magura.com >>> service >>> downloads.

- The check the air pressure see Adjusting the suspension (Air pressure), page 25.
- Check the tension and ease of operation of the RCL² inner cables make sure that the corresponding dial immediately responds to you actuating the RCL² – see Fit the RCL² Bowden cable, page 22.

MAINTENANCE

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① MAGURA suspension forks have internal permanent lubrication and excellent sealing material so that very little maintenance work is required for the internal components. Once a year, you will need to have your MAGURA suspension fork serviced in a professional bicycle workshop or by an authorised MAGURA service centre.

If you are a frequent user, also consider the fact that this exposes your suspension fork to more wear and thus requires more frequent maintenance intervals and checks.

EXCHANGING THE BATTERY/RECHARGEABLE BATTERY

NOTICE

Damage to material due to faulty installation work.

- The rechargeable battery of the eLECT unit is exclusively allowed to be exchanged directly at MAGURA.
- ① The battery of your eLECT remote control must be exchanged if the LED of the remote control does not give a signal when actuated, or indicates a corresponding fault signal see RECTIFYING ELECT FAULTS, page 32.
- ☞ Remove the rubber ring (3) on the eLECT remote control [M2].
- Remove the remote control.
- Use a coin to unscrew the battery compartment cover(1) counter-clockwise [T1].
- Remove the exhausted battery.
- Insert a new battery (CR 2032) (2) positive terminal (+) outward!
- Make sure that the rubber seal is clean, undamaged and fits accurately in its seat.
- Use a coin to screw the battery compartment cover closed clockwise.
- Install the remote control
 - see Installing the eLECT remote control, page 23.
- Synchronise the remote control
 - see Synchronising the eLECT remote control, page 24.
- ${\rm \textcircled{O}}$ If eLECT has already been calibrated, there is no need for recalibration after a battery change and synchronisation!

MAINTENANCE

RECTIFYING **elect** faults

	FAULT	CAUSE	RECTIFICATION
eLECT UNIT	→ LED flashes red slowly 3× (1 s). Synchronising.	→ Connection problem, synchronisation failed.	 Check the battery of the remote control. Remove disruptive influences. Perform a reset. Perform synchronisation again.¹
	→ LED flashes 4× very quickly (0.25 s) red. When button pressed.	→ Rechargeable battery capacity exhausted. Sleep mode.	☞ Charge the rechargeable battery. ²
	→ eLECT unit is not working.	→ Rechargeable battery capacity exhausted. Sleep mode.	☞ Check the rechargeable battery capacity. ³
		→ Incorrect calibration.	 Perform a reset and test. Perform the calibration again if necessary.⁴
		\rightarrow eLECT unit pointing in the wrong direction.	Make sure that the direction arrow ⁽²⁾ is point- ing forward in the riding direction ^[L1] .
		→ eLECT unit defective.	MAGURA service center.
eLECT REMOTE CONTROL	→ LED flashes 4× very quickly (0.25 s) red.	→ Rechargeable battery capacity exhausted. Sleep mode.	☞ Charge the rechargeable battery. ²
	→ LED flashes 3× slowly (1 s) green. Synchronising. When button pressed.	 → Connection problem, synchronisation failed. ① Battery capacity high. 	 Remove disruptive influences. Perform a reset. Perform synchronisation again.¹
	→ LED flashes red 3× slowly (1 s). Synchronising. When button pressed.	 → Connection problem, synchronisation failed. → Battery capacity exhausted. 	 Exchanging the battery.⁵ Remove disruptive influences. Perform a reset. Perform synchronisation again.¹

¹ - see Synchronising the eLECT remote control, page 24.

² - see Charging the eLECT rechargeable battery, page 23.

⁴ - see Calibrating eLECT, page 27.

5 - see Exchanging the battery/rechargeable battery, page 31.

3 – see Checking the eLECT rechargeable battery capacity, page 30.

PERFORMING AN **elect** reset

☞ Switch off the eLECT (OFF) [K1].

 $\ensuremath{\mathscr{T}}$ Leave the eLECT switched off for at least 10 seconds.

☞ Switch on the eLECT (ON).



WARRANTY

Parts, components and assemblies subject to normal wear and tear are not covered under this warranty.

The warranty can expire when use according to the terms is no longer applicable. To this appropriate use also belongs the conditions for operating, maintaining and servicing as prescribed in the manual.

Like every other product, the fork also contains parts that wear out as time passes by. The life span of these parts depend on the type and frequency of use, as well on care and maintenance. Please note that the usual wear of parts is normal and therefore no reason for objection. This especially applies to: bushings, seals and the surface of the stanchions. Machining or facing of the disc mounts on the fork is not allowed, as the corrosion protection will be damaged. It's not necessary, as the mounts are machined previously before coating.

Warranty duration and laws may vary from state to state and/or country to country.

Warranty cases should be dealt normally by your dealer. But you can send warranty cases also directly to MAGURA or the official service partners. We point out that a warranty case can only be handled with an enclosed proof of purchase.

The warranty can expire when:

- Abnormal strain, neglect, abuse and/or misuse.
- Accident or collision damage.
- Application of not-original MAGURA parts and lubrication products.
- Changing the surface (e.g. painting, machining or facing of the disc mounts, ...).
- Changing of the structure (e.g. drilling holes, assembly of lowriders, ...).
- Opening the eLECT unit.
- Removal or garble of the serial number.
- Incorrect maintenance.
- Transport damage or loss.
- Exceeding the system weight of 130 kg (286 lb).

DECLARATION OF CONFORMITY

The **eLECT** system for electronic control of the compression stage damping (suspension fork, rear shock) and height regulation (seat post) conforms to the requirements of EU Directives 2014/53/EU (radio equipment and telecommunications terminal equipment) and 2014/30/EU (electromagnetic compatibility).

CE

FCC ID: 2AF4AELECT

IC: 20786-ELECT

MODEL: FORK

nd with Industry

This device complies with Part 15 of the FCC Rules and with Industry Canada licence-exempt RSS standard(s). Operation is subject to the following two conditions:

- 1. This device may not cause harmful interference.
- 2. This device must accept any interference received, including interference that may cause undesired operation.

The detailed original declarations of conformity can be requested at **www.magura.com**

The staff at MAGURA work continuously on improving our products in the context of ongoing technical development. For this reason, we reserve the right to make changes compared to the figures and descriptions in this User Manual. This does not entitle you to claim for changes to products that we have already delivered. For up-to-date information, visit www.magura.com

Technical dimensions and weights are to be understood subject to normal tolerances.

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